

REVCAMUK

Reversing cameras UK Ltd

Instructions for our MON1010Q-AHD 4 Channel Quad Split-Screen Monitor

B24+ Update Model



This 4 channel vehicle monitor can be used to display various reversing cameras and side cameras, as well as producing a split screen arrangement if desired.

The menu system is quite powerful and allows for various functions and adjustments. This booklet will help navigate you through some of these features, as well as give guidance on wiring the display.

Safety and Installation Precautions

If you are not using a cigarette lighter to connect to the vehicle electrics we recommend disconnecting the negative terminal of your vehicles battery. Be aware this may reset your clocks/computer/radio code.

The display panel of the monitor is delicate and pressing the front can cause the thin glass sheet inside to crack. If this happens a black area will form around the line of the crack. Be careful not to apply pressure to the front of the monitor.

Modern vehicles now have very complex electrical systems. In order to reduce fuel consumption many vehicles use smart battery charging. This can mean the voltage applied to the battery terminals can rapidly fluctuate and go beyond the normal voltage ranges you would expect. **UNDER NO CIRCUMSTANCE TAKE YOUR POWER DIRECTLY FROM A VEHICLE BATTERY.**

Contents of the box for our high definition split screen vehicle monitor for AHD side view and reversing cameras



Wiring harness is 2M long, with a disconnect point around 25CM back from the monitor. The various coloured trigger wires do not have to be

connected up, except if you wanted the monitor to full screen under certain situations e.g. reverse light/indicator lights. The power input is via a 2.1x5.5mm DC socket. Our standard red+black hardwiring is included. Also fits our range of lighter plug/fuse tap leads.

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Technical Specification

Power supply: 12 - 24v DC	Dimensions: 250 x 165 x 31mm (not including bracket)
TV system: PAL or NTSC	7 Buttons
Resolution: 1024 x R.G.B x 600	4 trigger wires to link to indicators or reversing light with time delay
10 inch Colour IPS panel display	On screen menu
Working temperature: 0 - 60 degrees C	
Storage temperature: -10 to 70 degrees C	

Wiring Harness Guide

You will notice that the monitor has a short 25cm fly lead. This then plugs in to a 2M long lead that we refer to as the monitor wiring harness. One end of this has a 14 pin connector that fits in to the monitor fly lead, whilst the other end has the following inputs/wires listed below :

- 4x 4 pin male aviation connectors - the inputs for the 4 available channels.
- 1x 2.1/5.5mm DC Power Socket - fits the included standard red/black wire to DC plug, as well as our range of 12V lighter plugs and fuse taps/piggyback fuse holders.
- 4x coloured trigger wires with CH1, CH2, CH3, CH4 labelled on to them - these can be connected to various power sources to trigger a camera if an event occurs e.g. to show reversing camera when reverse light gains power.

Trigger Wire Functions

There are 4 coloured wires that have CH1, CH2, CH3 and CH4 printed on their labels. When one of these wires has a voltage applied, the monitor will full screen the related channel e.g. the CH2 wire is connected to reverse light and you select reverse, the camera plugged in to Channel 2 will full screen.

If you are using multiple trigger wires, the monitor will split the screen between the triggered channels. This can create a two, three or four way split view depending on how many inputs are active. Please note that if more than one trigger has a flashing signal, such as when hazard lights are on at the same time as reverse, the split view will flash on and off with the indicator rhythm. If only one trigger is active the screen will remain steady as long as the ACC delay time is set (see page 7). We are

working with the manufacturer to correct this behaviour on future versions, and in the meantime we recommend using the traditional mode button if you wish to display a permanent two, three or four way split.

Please kindly note that these trigger wires are not necessary to attach. If you do not want to wire up to your reverse lights etc you can leave these wires blank. We usually recommend adding a bit of insulation tape over the ends just in case. If you wish to setup your monitor to run full time, you simply have to connect the red wire to a positive, and the black wire to earth. The trigger wires can be left unconnected in this case. The monitor remembers its last power state when power is lost. So, if you had your monitor on before you turn the ignition off, when ignition is turned back on, the monitor will power up automatically.

Choosing a power supply and earth

We recommend that you use a switched ignition power supply, either 12V or 24V (it will automatically work on either).

We advise against going directly to the vehicle battery. Otherwise the system will be at risk due to the voltage fluctuations experienced as the alternator kicks on/off.

Avoid always on power supplies - the monitor will still consume power even when you press the power button and the monitor goes to standby mode.

We recommend earthing direct to the chassis, at a point with a bare metal surface. We recommend against piggybacking off another existing earth wire.

Button Layout

The monitor has 7 buttons located at the front of the monitor, see photo below :



Menu - This takes you to the On Screen Menu Display

CH1/Left Arrow - If you are not in the menu system, pressing this will full screen Channel 1. If you are in the menu system, pressing this will move the selection or adjust to the left.

CH2/Right Arrow - If you are not in the menu system, pressing this will full screen

Channel 2. If you are in the menu system, pressing this will move the selection or adjust to the right.

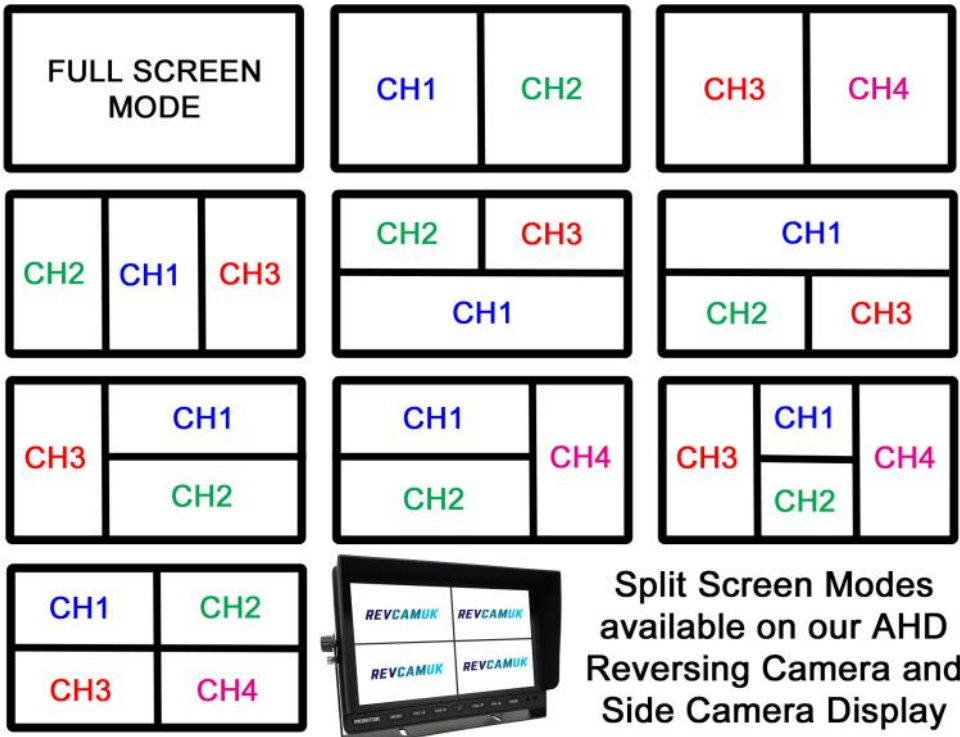
Standby / Power Icon - This will turn the monitor display ON/OFF

CH3/Down Arrow - If you are not in the menu system, pressing this will full screen Channel 3. If you are in the menu system, pressing this will move the selection or adjust downwards.

CH4/Up Arrow - If you are not in the menu system, pressing this will full screen Channel 4. If you are in the menu system, pressing this will move the selection or adjust upwards.

Mode - This changes display mode e.g. between the various split screen arrangements that you can select.

Split Screen Modes



Split Screen Modes available on our AHD Reversing Camera and Side Camera Display

This monitor will allow you to cycle through various split screen modes, as well as allowing you to full screen an individual camera. To go through the various modes simply press the “Mode” button on the front of the display.

Menu Guide

The monitor menu system can be accessed to change various settings. The following pages will guide you through the various options that you can modify. To access the menu, press the menu button, then use the arrow keys to navigate around.

Picture

To access ensure the blue selection box is over the picture settings, then press the CH2/ right arrow. This will open up a new set of menu options. You will notice that blue selection box first highlights CAM1, this camera will also full screen whilst you make modifications. If you wish to modify a different camera please use the CH2/Right Arrow key to move the selection box to the desired camera channel.

To modify the picture settings for a camera ensure that the selection box is highlighting it. Then use the CH3/Down Arrow to move down to the following settings:

Brightness - Using the left or right arrow buttons you can change the brightness of the picture on this channel.

Colo(u)r - Excuse the American English. Using the left or right arrow buttons allows you to change how much colour is present on the picture of this channel.

Contrast - Using the left or right arrow buttons you can change the contrast of the picture on this channel.

Reset - Select this option to reset any previous picture adjustments back to factory settings.

Volume

The volume setting menu allows you to modify the volume of the monitor speaker. Most cameras do not have a microphone built in, so this setting won't apply to most people. If you have a reversing camera with a microphone, please adjust it to your desired volume level by using the right or left arrow buttons.

Rotate

This covers the rotation of the entire display. Any changes to this setting will affect the

whole display including text. We suggest leaving it on setting 2. If you are looking to mirror/un-mirror one channel please see the mirror flip menu setting (page 8).

Blue Screen

As standard this is switched to OFF, which will show any empty channels as black backgrounds. Changing this to ON means that any empty channels will show as blue backgrounds on the screen.

Auto Cycle

If you change this setting to ON, the monitor will automatically cycle through all the channels by itself.

Language

This monitor can be changed to a number of language settings for the on screen display. Use the left/right arrow buttons to change the language if desired. If you are checking the manual to work out how to get English back simply press Menu Button, then CH3/Down Arrow button 7 times, then the left/right arrows until you see English.

ACC Delay

Notice the arrow sign to the right hand side. This arrow means that pressing the right arrow button will take you to a new menu with more settings.

This setting relates to the trigger wires and allows you to change how many seconds the monitor full screens the channel after the trigger wire no longer has power to it. Most commonly this is used for people when they use an indicator light as a trigger. Naturally it would not be desirable for the monitor to flash on and off with the indicator light flashes. Changing the setting so that the number is greater than the number of seconds between indicator light flashes means that the monitor won't flash on and off.

Guide Line

Allows you to choose whether to add guidelines on to the channel when the trigger wire for that channel is active.

Mirror Flip

This can be quite useful to a number of people, namely those that are fitting cameras that look forward or directly out to the side. Most vehicle cameras on the market are mirror imaged, which is great for cameras looking backwards, but confusing for cameras facing forwards. If you have a mirror image that you want the monitor to convert in to a

normal view camera simply use this function to change your desired camera channel to mirror - this mirrors the cameras mirror = normal view.

Using Alternative Brackets with Display

The U bracket that comes as standard with the monitor can be removed so an alternative bracket can be fitted to the rear channel of the monitor instead.

To remove the U bracket, simply undo both the thumb screw and the allen key screw from both sides. Then remove the monitor from the U bracket.

To fit the new bracket to the monitor, slide the fitment in to the rear channel of the monitor and use the brackets tightening mechanism to lock the two parts together.

We stock a range of brackets to fix the display to various locations in the vehicle.

See the image to the right, which shows our optional brackets for mounting to the rear channel of this monitor.

